

WHAT IS CLAIMED IS:

1. A vibration proof mount device not only for elastically supporting one of left and right end portions of a power plant mounted on a vehicle with the length direction of the power plant aligned in the traverse direction of the body of the vehicle, but also having
5 an oscillation limiting mechanism for limiting oscillation of the power plant in a roll direction thereof, wherein

the oscillation limiting mechanism has a receiving member for a force in the vehicle body longitudinal direction receiving at least a compressive force in the vehicle
10 body longitudinal direction between a member of the vehicle body and a member of the power plant facing each other in the vehicle body longitudinal direction, and

the receiving member for a force in the vehicle body longitudinal direction is constructed of: a rubber portion and a core body made of a material higher in stiffness than the rubber portion and provided integrally with the rubber portion in a single piece at least
15 so as to be revolvable around an axis in the vehicle body traverse direction by a predetermined angle or more.

2. The vibration proof mount device of claim 1, wherein

a hollow portion is formed in the rubber portion of the receiving member for a
20 force in the vehicle body longitudinal direction at least so that the core body can be revolved around an axis in the vehicle body traverse direction.

3. The vibration proof mount device of claim 2, wherein

the hollow portion of the receiving member for a force in the vehicle body
25 longitudinal direction is formed so as to communicate with outside the rubber portion and

at least one of inner walls in the front and rear portions of the rubber portion enclosing the hollow portion is caused to swell relatively into the hollow portion on one of the upper and lower sides thereof and to thereby at least embed the core body in the swell portion.

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4. The vibration proof mount device of claim 3, wherein

the hollow portion of the receiving member for a force in the vehicle body longitudinal direction is formed so as to pass through the rubber portion in the vertical direction and the swell portion is formed at a site relatively in the lower side in the hollow portion.

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5. The vibration proof mount device of claim 1, wherein

the core body in the receiving member for a force in the vehicle body longitudinal direction is in the shape of a rectangle the length of which in the vehicle body longitudinal direction is more than the length in the vehicle vertical direction as viewed in the traverse direction of the vehicle body.

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6. The vibration proof mount device of claim 1, wherein

the core body in the receiving member for a force in the vehicle body longitudinal direction is provided so as to be revolved around an axis in the vehicle body traverse direction by receiving a compressive force acting between a member of the vehicle body and a member of the power plant.

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7. The vibration proof mount device of claim 6, wherein

the rubber portion in the receiving member for a force in the vehicle body

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longitudinal direction includes: a connecting portion connecting the core body to one of the member of the vehicle body and the member of the power plant; and a protruded end portion directed to the other member thereof from the core body, wherein the connecting portion and protruded end portion are vertically shifted in an offset arrangement.

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8. The vibration proof mount device of claim 6, wherein

the core body in the receiving member for a force in the vehicle body longitudinal direction is a crank-like shape as viewed in the vehicle body traverse direction and the front end portion and the rear end portion are vertically shifted in an offset arrangement.

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9. The vibration proof mount device of claim 6, wherein

the core body in the receiving member for a force in the vehicle body longitudinal direction is inclined so that the front end portion and rear end portion are vertically offset in position.

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10. The vibration proof mount device of any of claims 2 to 9, wherein

a member of the vehicle body in the shape of an inverted U letter is disposed so as to cross over the body of the mount on which a static load of the power plant is imposed to fix the lower ends of leg portions of a pair located before and after the member of the vehicle body to a side frame of the vehicle body at positions before and after, respectively, the body of the mount and

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the receiving member for a force in the vehicle body longitudinal direction is disposed at at least one of the front and rear sites of an outer wall portion of the body of the mount, which is the member of the power plant, so as to protrude toward a leg portion of the member of the body of the vehicle which the receiving member faces in the vehicle

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body longitudinal direction.

11. The vibration proof mount device of claim 1, wherein

members of the vehicle body are provided before and after members of the power
5 plant so as to face each other,

a rubber portion of the receiving member for a force in the vehicle body longitudinal direction is provided on one of the member of the power plant and the corresponding member of the vehicle body, and

the core body of the receiving member for a force in the vehicle body longitudinal
10 direction not only is inclined by a predetermined angle relative to a horizontal plane in the vehicle body longitudinal direction, but is also disposed so as to surround the member of the power plant across more than a half of the circumference from one of the left and right sides so as to receive a compressive force in the vehicle body longitudinal direction between the member of the power plant and the corresponding one of the members in the
15 front and rear sides of the vehicle body.

12. The vibration proof mount device of claim 11, wherein

the rubber portion of the receiving member for a force in the vehicle body longitudinal direction is provided to the member of the power plant and

20 a flat plane portion in almost parallel to a surface of the member of the vehicle body which the flat plane faces is formed at at least one end portion of the front and rear sites of the core body.

13. The vibration proof mount device of claim 11, wherein

25 the rubber portion of the receiving member for a force in the vehicle body

longitudinal direction is provided to the member of the power plant and a surface with a circular arc in section swelled in the middle of the vertical width is formed at at least one end portion of the front and rear sites of the core body.

5 14. The vibration proof mount device of claim 11, wherein
the core body in the receiving member for a force in the vehicle body longitudinal direction is embedded in the rubber portion at least at both of the front and rear sites of the member of the plant power, and

10 holes are formed that extend in the vertical direction down or up to a surface of
the core body in the rubber portion from the upper or lower surface of the rubber portion at sites thereof corresponding to sites on the front and rear portions of the core body so that height positions of the bottoms of the holes on the front and rear portions of the core body are different from each other.